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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|------------------------------------|----------------------|---------------------|------------------|
| 10/567,622 | 09/21/2006 | Kunio Fukuda | SONY JP 3.3-401 | 1307 |
| | 7590 08/21/200 /ID, LITTENBERG, | 9 | EXAMINER | |
| KRUMHOLZ & | & MENTLIK | | PHAM, QUANG | |
| 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090 | | | ART UNIT | PAPER NUMBER |
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| | | | 08/21/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
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| | 10/567,622 | FUKUDA, KUNIO | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | QUANG PHAM | 4192 | | | | |
| The MAILING DATE of this communication app | ears on the cover sheet with the c | orrespondence address | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 21 Se | entember 2006 | | | | | |
| | action is non-final. | | | | | |
| | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-10</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) <u>1-10</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>08 February 2006</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal Pa | | | | | |
| Paper No(s)/Mail Date <u>02/08/2006 09/21/2006 11/05/2007 02/17/2009</u> . 6) Other: | | | | | | |



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DETAILED ACTION

In this instant application, claims 1-10 have been examined and considered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Takei et al. (US Patent 6,545,709 B2); hereinafter referenced as Takei.
- 3. Regarding **claim 1**, Takei discloses a wireless receiving apparatus and method therefor. Further, Takei discloses a wireless communication system for data transmission by radio waves between a data supply source apparatus and a data provided destination apparatus, characterized in that:

the data supply source apparatus has an RFID (Radio Frequency

Identification) tag function (FIG. 4 elements 304, 310, 414, and 418;

column 6 lines 59-67 and column 7 lines 1-2) that transmits data by a

back scattering scheme by absorbing (reception) or reflecting

(transmission) external radio waves (column 6 lines 7-28) in accordance

with a bit string of the data through an on/off control of an antenna switch

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to make an antenna in a terminated state or an open state (column 6 lines 29-36 and FIG. 3); and

the data provided destination apparatus has a reader function (FIG. 10 elements 714, 722, and 902) that transmits radio waves in a predetermined frequency band and reads data of an RFID tag in accordance with reflected waves (column 6 lines 7-36 and column 10 lines 40-57).

4. Regarding **claim 2**, Takei discloses everything as claimed (see claim 1). Further, Takei discloses *the wireless communication characterized in that:*

the data provided destination apparatus transmits a non-modulated carrier or a modulated control signal, and the data supply source apparatus transmits data by absorbing or reflecting external radio waves on a basis of termination control of the antenna (column 6 lines 7-36, column 8 lines 10-19, FIG. 7 and FIG. 10); and

the data provided destination apparatus receives the data on a basis of presence/absence of reflected waves from the supply source apparatus (column 10 lines 40-57, FIG. 7 and FIG. 10).

5. Regarding **claim 3**, Takei discloses everything as claimed (see claim 1). Further Takei discloses *the wireless communication characterized in that:*

the data provided destination apparatus has means for storing or reproducing data received from the data supply source apparatus

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(column 10 line 58 – column 6 line 12 and FIG. 10 elements 1006 and 1010).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 4 and 5 are rejected under 35 USC 103(a) as being unpatentable over Takei et al. (US Patent 6,545,709 B2); hereinafter referenced as Takei, in view of Maeda et al. (US Patent 6,408,095 B1); hereinafter referenced as Maeda.
- 8. Regarding **claim 4**, Takei discloses everything as claimed (see claim 1). Further, Takei discloses the data provided destination apparatus receives the data on a basis of presence/absence of reflected waves from the supply source apparatus, performs error detection, and transmits an error detection result in a form of a control signal made of an ASK, PSK or FSK modulation wave (column 8 lines 10-19; signal modulation, column 10 lines 7-15; error detection function, FIG. 7, FIG. 10); however, Takei fails to disclose the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control. However, the examiner maintains that it was well known in the art to provide the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control, as taught by Maeda.

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9. In a similar field of endeavor, Maeda discloses a system, apparatus and method for communication, display and output of images. In addition, Maeda discloses the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control (column 10 lines 7-67, FIG. 8, and FIG. 9).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Takei by specifically providing the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control, as taught by Maeda, for the purpose of satisfying image quality and transmission rate of image information with display performance of the display unit.

- 10. Regarding **claim 5**, Takei discloses everything as claimed (see claim 1); however, Takei fails to disclose the wireless communication characterized in that the data supply source apparatus having the photographing means is remotely controlled by a command in the control signal transmitted from the data provided destination apparatus. However, the examiner maintains that it was well known in the art to provide the data supply source apparatus having the photographing means is remotely controlled by a command in the control signal transmitted from the data provided destination apparatus, as taught by Maeda.
- 11. In a similar field of endeavor, Maeda discloses a system, apparatus and method for communication, display and output of images. In addition, Maeda discloses the data supply source apparatus having the photographing means is remotely controlled by a

command in the control signal transmitted from the data provided destination apparatus (column 10 lines 7-67, FIG. 8, and FIG. 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Takei by specifically providing the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control, as taught by Maeda, for the purpose of satisfying image quality and transmission rate of image information with display performance of the display unit.

- 12. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei et al. (US Patent 6,545,709 B2); hereinafter referenced as Takei, in view of Raj Bridegall (USPG Pub 2003/0104848 A1); hereinafter referenced as Bridegall.
- 13. Regarding **claim 6**, Takei discloses the wireless receiving apparatus and method therefor. Further, Takei discloses a wireless communication apparatus for transmitting data, characterized by comprising: a signal processing unit for processing transmission data (FIG. 5 and FIG. 11); and a wireless transmission module including an antenna, an antenna switch (FIG. 3 elements 310 and 312), wherein data is transmitted by a back scattering scheme by absorbing or reflecting external radio waves in accordance with a bit string of the data through an on/off control of the antenna switch to make the antenna in a terminated state or an open state in accordance with a bit image of the transmission data (column 6 lines 7-36 and FIG. 3); however, Takei fails to discloses the wireless communication apparatus comprises an antenna load. However, the

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examiner maintains that it was well known in the art to provide the wireless communication comprising *the antenna load*, as taught by Bridegall.

14. In a similar field of endeavor, Bridegall discloses an RFID device, system and method of operation including a hybrid backscatter-based RFID tag protocol compatable with RFID, Bluetooth and/or IEEE 802.11X infrastructure. Further, Bridegall discloses the wireless apparatus with the antenna load ([0029]-[0032] and FIG. 4)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Takei by specifically providing the data supply source apparatus demodulates the control signal at the reception unit and demodulation unit to perform re-transmission control, as taught by Bridegall, for the purpose of cooperate the RFID tag into system and method of operation protocol compatible with Bluetooth and/or IEEE 802.11x infrastructure.

- 15. Regarding **claim 7**, Takei and Bridegall disclose everything as claimed (see claim 6). Further, Takei discloses the wireless transmission module unit further has a reception unit and a demodulation unit for receiving and processing an external control signal made of ASK, PSK or FSK modulation waves (column 6 lines 7-28).
- 16. Regarding **claim 8**, Takei and Bridegall discloses everything as claimed (see claim 6). Further, Takei discloses the wireless communication apparatus characterized by further comprising:

transmission data generating means for generating the transmission data (column 6 lines 7-28 and column 8 lines 10-29).

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17. Regarding **claim 9**, Takei and Bridegall discloses everything as claimed (see claim 6). Further, Takei discloses the wireless communication apparatus characterized by further comprising:

a moving image through a camera function, wherein the signal processing unit processes a photographed image by the photographing means as the transmission data (column 6 lines 59 – column 8 line 6, column 10 line 58 – column 11 line 16, and FIG. 4 elements 402 and 408).

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- 18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takei et al. (US Patent 6,545,709 B2); hereinafter referenced as Takei, in view of Bridegall (USPG Pub 2003/0104848 A1); hereinafter referenced as Bridegall, and further in view of Makoto Shizukuishi (US Patent 7,391,967 B2); hereinafter referenced as Shizukuishi.
- 19. Regarding **claim 10**, Takei and Bridegall disclose everything claimed as applied above (see claim 6); however, Takei and Bridegall fail to disclose an *external interface* means for connecting an external apparatus for supplying the transmission data. However, the examiner maintains that it was well known in the art to provide the external interface means for connecting an external apparatus for supplying the transmission data, as taught by Shizukuishi.

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20. In a similar field of endeavor, Shizukuishi discloses a camera system. In addition, Shizukuishi discloses the *external interface means for connecting an external apparatus for supplying the transmission data* (column 8 line 53 – column 9 line 5, and FIG. 3A-3B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Takei and Bridegall by specifically providing the external interface means for connecting an external apparatus for supplying the transmission data, as taught by Shizukuishi, for the purpose of improving usage convenience of camera.

Citation of Pertinent Art

- 21. The prior are made of record and not relied upon is considered pertinent to applicant's disclosure:
 - a. Squilla et al., USPG Pub 2004/0183918 A1, discloses producing enhanced photographic products from images captured a known pictures sites.
 - Kusaka et al., USPG Pub 2008/0239083 A1, discloses electronic apparatus, electronic camera, electronic instrument, image display apparatus and image transmission system.
 - c. Nagata et al., US Patent 5,671,254, discloses modulation, demodulation and antenna coupling circuits used in IC card reading/writing apparatus, and method of supplying power to the IC card.

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d. Takahashi, USPG Pub 2003/0036397 A1, discloses communication apparatus capable of connecting information processing apparatus.

- e. Nihei et al., US Patent 7,304,682 B2, discloses image processing system, image capturing apparatus and system and method for detecting backlight status.
- f. Maeda, US Patent 7,443,420 B2, discloses printing system including a printing apparatus for printing image data transmitted from an image pickup apparatus identified by an approved ID information.
- g. Conoval, US Patent 6,400,903 B1, discloses Remote camera replay controller method and apparatus.
- IEEE Transactions on Microwave Theory and Techniques, Vol. 55, No. 8,
 August 2007 Variable Antenna Load for Transmitter Efficiency
 Improvement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUANG PHAM whose telephone number is (571) 270-3668. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/QUANG PHAM/ Examiner, Art Unit 4192 /LUN-YI LAO/ Supervisory Patent Examiner, Art Unit 4100